

The Prevalence of Syphilis Infections After an HIV Diagnosis

Kathryn E. Macomber, M.P.H., HIV/STD Epidemiologist
HIV/AIDS Surveillance Section, Bureau of Epidemiology
Communicable Disease and Immunization Division
Michigan Department of Community Health

In December 2002, a database match was conducted between the Detroit Syphilis Morbidity Database and the HIV/AIDS Reporting System (HARS) to characterize those who are co-infected. As of the 2001 Centers for Disease Control STD Surveillance Report, the City of Detroit ranked number one in the nation in the rate of infectious syphilis cases reported per 100,000 persons. The Detroit Syphilis Database contains information on infectious and early latent cases diagnosed in Detroit, Hamtramck, Highland Park, Harper Woods, and the Grosse Pointes between 1997 and 2002 and contains approximately 3,000 records. HARS contains approximately 21,000 records of cumulative HIV and AIDS cases reported in Michigan since 1981. A database matching software system was used to link records in each database that matched on name, date of birth, sex, and race.

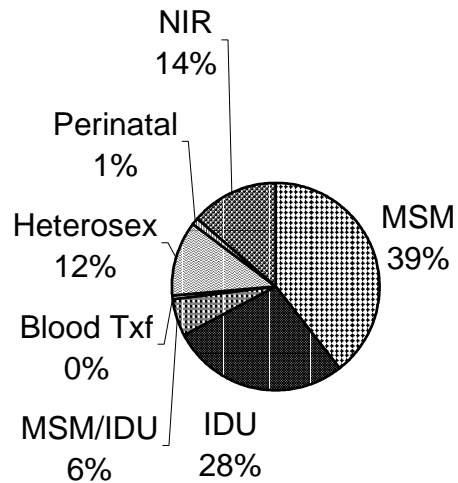
There were 111 infectious and early latent syphilis cases discovered to also have HIV; this is 3.7% of all syphilis cases diagnosed between 1997 and 2002. Of those, 74 had been diagnosed with syphilis *after* their HIV diagnosis date or 2.5% of all syphilis cases between 1997 and 2002 presented with concurrent HIV infection. Of the 74 cases diagnosed with syphilis after HIV, 74% were male and 97% were African American.

The mode of HIV transmission for these 74 patients was: 45% MSM, 21% IDU, 9% sex with someone who is HIV+, <1% sex with an IDU and MSM/IDU, and 24% no reported risk. Among these 74 patients diagnosed with syphilis after HIV, 57% had HIV/not AIDS at the time of syphilis diagnosis and 43% had AIDS. Sixty-one percent were diagnosed with infectious syphilis, and 39% were diagnosed with early latent syphilis.

We looked at the average timeline to syphilis diagnosis after the initial HIV diagnosis. The minimum number of complete months between these diagnoses was 1 month and the maximum was 161 months. The average was 50 months, or approximately 4.2 years.

The advent of highly active antiretroviral therapy (HAART) has significantly improved the longevity and quality of life for those diagnosed with HIV. Many years after an HIV diagnosis, some of those who are HIV infected are continuing to engage in risky behaviors leading to STD acquisition. Ulcerative STDs, like syphilis, significantly increase the likelihood for HIV transmission. It is important to consistently teach the message of safe sexual practices to prevent both STD and HIV transmission. Physicians, especially in high morbidity areas like the City of Detroit, should be aware of this risk and screen their patients for both infections as appropriate.

**Risk Breakdown for HIV/AIDS Patients Living
in the City of Detroit
N=8,385**



**Risk Breakdown for HIV/AIDS *and* Syphilis
Cases Living in the City of Detroit
N=74**

